

## Figure 1: Pump Assembly (with wash system)

## Installing the Piston Wash System

WASH CYLINDER

3

 Remove the liquid end assembly as follows: On pumps with variable piston stroke length designs, set the pump to the maximum stroke length. Unscrew the two socket head bolts while holding the liquid end against the pump housing. Pull the liquid end straight out from the pump housing, in line with the axis of the piston. If you cock or tilt the liquid end, you may break the piston. See Figure 1.

6. O RING

- 2. Remove the retainer from the liquid end. This would be a good time to replace the piston seal in the liquid end assembly, following the instructions provided with the piston seal kit.
- 3. Install the O ring provided in the Piston Wash System Kit in the gland in the liquid end where the retainer was installed.
- 4. Remove the piston from the pump housing.
- 5. Install the piston provided in the Piston Wash System Kit in place of the original piston.
- 6. Install the spring and compression ring.
- 7. Place the front end of the wash cylinder into the liquid end assembly. See Figure 2.
- 8. Place the retainer provided with the Piston Wash System Kit in the gland on the back end of the wash cylinder.
- 9. Install the liquid end and wash assembly on the pump body using the socket head bolts provided with the Piston Wash System Kit (two sets of bolts are included; the longer ones are used with PEEK or Kel-F liquid ends). Push the assembly onto the pump body, with the piston going through the retainer, in line with the axis of the piston.
- 10. Attach 1/16" ID flexible tubing to the inlet and outlet ports of the wash system.



## Using the Piston Wash System

The Piston Wash System is designed to flush the back end of the primary piston seal. By washing the back end of the piston, seal life can be significantly extended, especially when using buffers or solutions which crystalize with exposure to air and can lead to abrasion of the piston seal.

Your choice of a wash solution depends on the nature of the fluid being pumped. You may deliver the wash solution by gravity, manually using a syringe to flush periodically, or by using a pump to circulate the wash solution. We have generally found that pumping the wash solution is the most effective means of providing continuous washing.

While using the piston wash system will significantly extend the use interval between piston seal replacements, the piston seal will still require periodic replacement. In addition, the piston seal in the wash system will itself require periodic replacement. The liquid end (except for PEEK liquid ends) and the wash system use the same type seals.

## P/N Description

 5575
 Wash System Kit (includes piston).

 5576
 Wash System Piston Assembly.

 Piston seal assembly kits
 1022

 Piston seal assembly kit.
 Includes

 Fluoroloy G® piston seal, backup

If there is anything we can do to help you with these instructions, or, if you have comments or suggestions, please contact us at: (800) 969-3533

seal, installation tool and hex key.
 Piston seal assembly kit. Includes GF PTFE piston seal, installation tool and hex key.

Seal replacement kits

- 1180 Includes two Fluoroloy G® piston seals and backup washers.
- 1181 Includes five Fluoroloy G® piston seals and backup washers. 1363 Includes two GF PTFE piston seals (no backup washers are used
- 1363 Includes two GF PTFÉ piston seals (no backup washers are used).
   1364 Includes five GF PTFE seals (no backup washers are used).

Registered Trademarks: Fluoroloy G, Furon.

**<u>NOTE:</u>** If you retain the tools supplied with Eldex Part Nos. 1022, 1272, 1362 or you can purchase just the seals and re-use the tools.